**Appendix CC** 

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John Burcham
HARRF Superintendent
1521 South Hale Avenue, Escondido, CA 92029
Phone: 760-839-6273 Fax: 760-738-5168

February 25, 2005

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board
San Diego Region
9264 Sky Park Court, Suite 100
San Diego, CA 92123-4340
Attn: POTW Compliance Unit

Subject: Submittal of January 2005 Monthly Reports

Dear Sirs:

Attached are the subject Discharge Monitoring Reports for the Hale Avenue Resource Recovery Facility (HARRF) as required by Order No. 93-70.

If you have any questions, contact me at (760) 839-6273.

Sincerely,

John Burcham

HARRF Superintendent

Attached: January 2005 Monthly Reports

2005 FEB 28 P 12: 2

# **SELF- MONITORING REPORT**

**JANUARY 2005** 

CITY OF ESCONDIDO

Hale Avenue Resource Recovery Facility

Order No. 93-70

WATER QUALITY SONTROL BOARD

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Mary Ann Mann Utilities Manager

#### SELF- MONITORING REPORT REVIEW

To: CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

DISCHARGER City of Escondido, Hale Avenue Resource Recovery Facility
ORDER/RESOLUTION NO. 93-70

REPORT FOR JANUARY 2005 REPORT DUE FEBRUARY 2005

REPORT FREQUENCY MONTHLY

SIGNED UNDER PENALTY OF PERJURY L. Benchan

Our Review of the Attached Self-Monitoring Report Reveals the Following Monitoring Violation(s):

Two violations occurred in the month of January for

- 1. Recycled water turbidity was exceeded an average operation turbidity of 2 NTU on January 9 and 18, 2005.
- 2. No sample collected on January 18, 2005 for Total Coliforms analysis.

The Following Remedial Action will be (has been) Taken to Correct the Monitoring Violation Listed Above:

1. Turbidity violations.

During January 2005 the treatment plant experienced high influent flows caused by an extreme wet weather event(s). A suspected cause was a change in the wastewater makeup due the increased amount of rainwater. Currently the filter aid being used is a poly aluminum chloride (JenChem) product. This product works well within a specific pH range. We suspect that even a slight increase or decrease in pH may change the way the filter aid reacts. What we were experiencing was coagulation of

the floc post filter, causing an increase in turbidity. We are researching other filter aid products which would work more efficiently during these events.

#### 2. No sample collected for total coliforms.

Lack of a coliform sample was due to operator error. On January 15, 2005 recycled water was pumped to the storage reservoir. After the reservoir is filled the recycled water pump(s) automatically shut off. By January 18, 2005, through normal recycled water usage, the level had dropped to a preset point which automatically turned the Recycled Water pumps. The operator was unaware that the pumps had started and did not collect a sample for total coliforms testing. In the future the operation staff will manually shut down all recycle water pumps to eliminate automatic restarts. Operation supervisor has updated the operator SOP. Please see attachment.

# ThilE 22 Shut Down Procedure

#### Shut down Recycle Water Pump(s):

From Process Screen go to: RWPS (Pumps 10-P-1 through 10-P-5)

Click on the pump(s) that are running and select STOP

Note: If Reservoir reaches its level shut down set point, the pumps will shut down automatically. Wake sure you go over the shutdown procedures. If you do not select the pumps to STOP, they will start automatically when the reservoir reaches its level dead band set point.

#### Set T-22 Composite Sampler Program to HALT:

Go to top of RWPS Building

Press Halt button on composite sampler

Program will change to "Program Halted" indicating the composite sampler is off-line.

#### Set filter feed at ZERO:

From Process Screen go to: SEPS - Filter Influent Pumps

Click on *FLOWSP* (flow set point)

Punch in 0 MGD flow and press OK.

#### Set Filter Influent Pumps to STOP

From Process Screen go to: SEPS – Filter Influent Pumps Click on the pumps that are in AUTO and select STOP

#### Close all filters:

From Process Screen go to: Filters and Flocculators

Click on the green M for correspondent gate (9-G-5 through 9-G-12)

Select *CLOSE* position (after a few minutes M will turn red – closed position)

#### Close UV channel gate(s):

From Process Screen go to: UV System.

Click on the green M for 9-G-13 (channel 1) or 9-G-14 (channel 2).

Select CLOSE position. (Wait until Gates are completely CLOSED)

#### Turn off all UV banks: (After closing the UV gates)

From Process Screen go to: UV System.

Click on UV System Screens box

Click on Bank Control Start turning off each bank

UV-13-1 through uv-13-5 are on channel #1

UV-14-1 through uv-14-5 are on channel #2

Click on each bank and select OFF

(It takes approximately 30 seconds for the program to acknowledge your command)

Continue until all banks are off

To exit that screen, click on "Return to Main HMI"

#### Shut down Jenchem Pump:

From Process Screen go to: JenChem System
Click on the pump that is running Select STOP and close window

# Make sure Sodium Hypochlorite Pump to the Reservoir is not running:

If feeding from Sodium Hypochlorite System,
From Process Screen go to: Sodium Hypochlorite System
Click on 6-FD-1 (Pre/Post UV) Select STOP
If feeding from RWPS Sodium Hypochlorite System,
From Process Screen go to: RWPS Sodium Hypochlorite
Click on 10-FD-1 or 10-FD-2 Select STOP and close window

# Turn off air supply system and air dryer for Title-22:

Go to the compressor area (south east side of UV building)

Press the red buttons to stop compressors 9-ME-18 and 9-ME-19

Go behind the air dryer box. Press the start/stop button in the display box to turn it off.

Make sure Bac-Ti sample lines are closed so channels will not drain.

# 1. LE 22 Start Up Procedui

# Turn on air supply system and air dryer for Title-22:

Go to the compressor area (south east side of UV building)

Press the GREEN buttons to START compressors 9-ME-18 and 9-ME-19

Proceed to the air dryer.

Go behind the air dryer box and press the start/stop button in the display box to turn it

# Set filter feed. Start with 1 MGD if activating one channel or 2 MGD if activating two channels. Adjust flow as soon as turbidity start to come down or as necessary.

From Process Screen go to: SEPS - Filter Influent Pumps

Click on FLOWSP (flow set point)

Punch in desired MGD flow and press OK

Set Filter Influent pumps 7-P-6, 7-P-7 & 7-P-8 to AUTO

(If 7-P-8 trips please reset at SEPS MCC panel and again on HMI)

# Open filters: Start with two filters if flow to filters is set to 1 MGD or four filters If flow to filters is set to 2 MGD (each filter can handle 0.625 MGD).

From Process Screen go to: Filters and Flocculators

Click on the RED M for correspondent gate (9-G-5 through 9-G-12)

Select *OPEN* position the M will turn GREEN - (open-position)

### Start-Up Jenchem Pump:

From Process Screen go to: JenChem System

Click on desired pump (6-FD-7 or 6-FD-8)

Select AUTO then close window. Select designated pump to DUTY

Click on setup, click on number corresponding to dosage.

Punch in desired dosage (adjust Jenchem dosage as turbidity allows)

# Turn on all UV banks: (even if channel is empty)

\*(always use caution around empty channels when UV banks are on)\*

From Process Screen go to: UV System.

Click on UV System Screens box

Click on Bank Control Start turning on each bank

uv-13-1 through uv-13-5 are on channel #1

uv-14-1 through uv-14-5 are on channel #2

Click on each bank and select ON

(It takes approximately 30 seconds for the program to acknowledge your command)

Continue until all banks are ON

To exit that screen, click on "Return to Main HMI"

# Open UV channel gate(s):

From Process Screen go to: UV System.

Click on the RED M for 9-G-13 (channel 1) or 9-G-14 (channel 2).

Select *OPEN* position.

#### Put UV transmittance analyzer on-line:

Line that goes to the transmittance analyzer is located at the end of each channel. Manipulate valves to direct flow accordingly.

### Clean Q-vet if necessary: (Located inside of Transmittance Analyzer Box)

Q-vet will need to be removed by unlocking the small black housing.

Unscrew glass Q-vet and dump water then rinse with D.I. water.

Wipe glass clean with non-abrasive cloth or Kimwipe

When Q-vet is clean please re-install and lock small black housing.

### Clean all turbidity meters: (SEPS, after Filters and "Galley")

(Note: if turbidity going out is greater than 2ppm there will be a UV System RWPS Shutdown alarm)

The system will start a 0.150 MGD flush cycle RW pumps will not start until flush

cycle has been completed.

To verify flush cycle is over go to UV Systems and look at Total Overflow

# WAIT UNTIL FUSH CYCLE ENDS (.150 MGD) AND TURBIDITY IS BELLOW 2 PPM

#### Start Up Recycle Water Pump(s):

From Process Screen go to: RWPS

Click on desired pump(s) (Smaller pumps 10-P-1 & 10-P-2) and select AUTO

Make sure wet well level set point is at 13.0 ft.

If wet well level exceeds 14.4 ft it will overflow to the equalization pond.

# Make sure Sodium Hypochlorite Pump to the Reservoir is running (Post UV):

If feeding from Sodium Hypochlorite System,

From Process Screen go to: Sodium Hypochlorite System

Click on 6-FD-1 (Pre/Post UV)

Select AUTO

Click on setup, click on number corresponding to dosage.

Punch in desired dosage (start at 2 mg/l, click on "Apply New Values")

\*Adjust dosage later according to chlorine residual

If feeding from RWPS Sodium Hypochlorite System,

From Process Screen go to: RWPS Sodium Hypochlorite

Click on 10-FD-1 or 10-FD-2

Select AUTO and close window

# Resume T-22 Composite Sampler Program:

Go to the top of RWPS Building

Press RESUME button on composite sampler

Program status will return to "program running" indicating the composite sampler is on-line.

PS: AS SOON AS TURBIDITY IS LESS THAN 2 PPM, OPEN VALVES TO T-22 BACTI SAMPLE PORT TO FLUSH THE SYSTEM.

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR: January 2005** 

**REPORT DUE:** February 2005

**EXACT SAMPLE POINT: Effluent end of UV infection Channel** 

SAMPLE TYPE: Continuous recording Flow meter and Turbidity Meter

SIGNED UNDER PENALTY OF PERJURY

| Date     | Flow | Turbidity | Turbidity |
|----------|------|-----------|-----------|
| Units    | MGD  | NTU       | NTU       |
|          |      | Influent  | Effluent  |
| Reqt.    |      | Aveage    | Aveage    |
| 1/1/2005 | *    | *         | *         |
| 2        | *    | *         | *         |
| 3        | 0.72 | 3.4       | 1.3       |
| 4        | 0.57 | 1.5       | 1.3       |
| 5        | 0.06 | 2.0       | 1.6       |
| 6        | *    | *         | *         |
| 7        | 0.36 | 1.9       | 0.8       |
| - 8      | 0.58 | 2.4       | 1.5       |
| 9        | 1.13 | 2.3       | 2.3       |
| 10       | *    | *         | *         |
| 11       | *    | *         | *         |
| 12       | *    | *         | *         |
| 13       | *    | *         | *         |
| 14       | 0.45 | 2.3       | 2.0       |
| 15       | 0.20 | 5.1       | 1.6       |
| 16       | *    | *         | *         |
| 17       | *    | *         | *(        |
| 18       | 0.20 | 3.0       | (3.0)     |
| 19       | 0.43 | 2.7       | 0.6       |
| 20       | *    | *         | *         |
| 21       | 0.67 | 7.2       | 0.8       |
| 22       | . *  | *         | *         |
| 23       | * .  | *         | *         |
| 24       | *    | *         | *         |
| 25       | *    | *         | *         |
| 26       | 0.50 | 3.6       | 1.1       |
| 27       | *    | *         | *         |
| 28       | 0.71 | 1.3       | 0.9       |
| 29       | *    | *         | *         |
| 30       | *    | *         | *         |
| 31       | 0.68 | 1.01      | 0.87      |
| Average  | 0.5  | 2.8       | 1.4       |
| Maximum  | 1.1  | 7.2       | 3.0       |
| Minimum  | 0.1  | 1.0       | 0.6       |

<sup>\* :</sup>No distribution

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR : January 2005** 

**REPORT DUE:** February 2005

**EXACT SAMPLE POINT: Effluent end of UV infection Channel** 

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff

SIGNED UNDER PENALTY OF PERJURY

Va ipalant

| TC       | TOTAL COLIFORMS |            |  |  |  |  |  |
|----------|-----------------|------------|--|--|--|--|--|
| DATE     | Daily           | 7 day      |  |  |  |  |  |
|          | Maximum         | Median     |  |  |  |  |  |
| Units    | mpn/100ml       | mpn/100ml  |  |  |  |  |  |
| Reqt.    | 23              | 2          |  |  |  |  |  |
| 1/1/2005 | *               |            |  |  |  |  |  |
| 2        | *               | *          |  |  |  |  |  |
| 3        | < 2             | < 2        |  |  |  |  |  |
| 4        | < 2             | < 2        |  |  |  |  |  |
| 5        | 2               | < 2        |  |  |  |  |  |
| 6        |                 |            |  |  |  |  |  |
| 7        | < 2             | < 2        |  |  |  |  |  |
| 8        | < 2             | < 2        |  |  |  |  |  |
| 9        | < 2             | < 2        |  |  |  |  |  |
| 10       | *               | *          |  |  |  |  |  |
| 11       | *               | *          |  |  |  |  |  |
| 12       | *               | *          |  |  |  |  |  |
| 13       | *               | *          |  |  |  |  |  |
| 14       | < 2             | < 2        |  |  |  |  |  |
| 15       | < 2             | < 2        |  |  |  |  |  |
| 16       |                 | *          |  |  |  |  |  |
| 17       | <u>*</u>        | *          |  |  |  |  |  |
| 18       | **              | **         |  |  |  |  |  |
| 19       | < 2             | < 2        |  |  |  |  |  |
| 20       | *               | *          |  |  |  |  |  |
| 21       | < 2             | < 2        |  |  |  |  |  |
| 22       | *               | *          |  |  |  |  |  |
| 23       | *               | *          |  |  |  |  |  |
| 24       | *               | *          |  |  |  |  |  |
| 25       | *               | *          |  |  |  |  |  |
| 26       | < 2             | < 2        |  |  |  |  |  |
| 27       | *               |            |  |  |  |  |  |
| 28       | < 2             | < 2        |  |  |  |  |  |
| 29       | *               |            |  |  |  |  |  |
| 30       | *               | *          |  |  |  |  |  |
| 31       | < 2             | < 2        |  |  |  |  |  |
| Median   | < 2             | < 2        |  |  |  |  |  |
| Maximum  | 2 < 2           | < 2<br>< 2 |  |  |  |  |  |
| Minimum  | < 2             | < 2        |  |  |  |  |  |
|          |                 |            |  |  |  |  |  |

<sup>\*</sup> No distribution

<sup>\*\*</sup> Operation error

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FOR :January 2005

REPORT DUE: February 2005

**EXACT SAMPLE POINT:** Recycle pump station

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff & APCL

SIGNED UNDER PENALTY OF PERJURY Van Windert

| Constituent/<br>Property            | 12-month<br>Average<br>Limit | Daily<br>Maximum<br>Limit | Method      | ML/<br>PQL | MDL     | Sample<br>Date | Daily<br>Maximum | Monthly<br>Average | Units |
|-------------------------------------|------------------------------|---------------------------|-------------|------------|---------|----------------|------------------|--------------------|-------|
| Total Dissolved<br>Solid            | 1000                         | 1100                      | SM2540C     | 10         | 1       | 1/05           | 950              | 888                | mg/l  |
| Fluoride                            | 2.0                          |                           | EPA 300.0   | 0.05       | 0.008   | 1/3/05         | 0.646            | 0.646              | mg/l  |
| Chloride                            | 300                          | 330                       | EPA 300.0   | 0.5        | 0.08    | 1/3/05         | 184              | 184                | mg/l  |
| Sulfate                             | 350                          | 400                       | EPA 300.0   | 1          | 0.1     | 1/3/05         | 216              | 216                | mg/l  |
| Manganese                           | 0.05                         | 0.06                      | 200.7       | 0.005      | 1.7E-04 | 1/3/05         | 0.0374           | 0.0374             | mg/l  |
| Boron                               | 0.8                          |                           | 200.7       | 0.300      | 0.038   | 1/3/05         | 0.440            | 0.440              | mg/l  |
| Iron                                | 0.3                          | 0.4                       | 200.7       | 0.050      | 0.0054  | 1/3/05         | 0.0583           | 0.0583             | mg/l  |
| Adjusted Sodium<br>Absorption Ratio |                              |                           | Calculation |            |         | 1/3/05         | 4.52             | 4.52               | ·     |
| Percent Sodium                      | 60                           | 65                        | Calculation |            |         | 1/3/05         | 52.4             | 52.4               | %     |

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

**REPORT FOR : January 2005** 

**REPORT DUE:** February 2005

**EXACT SAMPLE POINT: Recycle pump station** 

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY APCL

SIGNED UNDER PENALTY OF PERJURY \_\_\_\_\_ Van without

| Constituent/ | Units | 6-Month | Daily    | Instantaneous | Method | PQL | MDL   |          |             |
|--------------|-------|---------|----------|---------------|--------|-----|-------|----------|-------------|
| Property     |       | Median  | Maximum  | Maximum       |        |     |       | Daily    | Max. Result |
| Sample Date  |       |         |          |               |        |     |       |          | 1/3/2005    |
| Arsenic      | ug/l  | 1100    | 6400     | 17000         | 200.7  | 5   | 1.2   | ٧        | 5           |
| Cadmium      | ug/l  | 220     | 880      | 2200          | 200.7  | 2   | 0.24  | ٧        | 2           |
| Chromium     | ug/l  | 440     | 1800     | 4400          | 200.7  | 5   | 2.1   | <        | 5           |
| Copper       | ug/l  | 220     | 2200     | 6200          | 200.7  | 10  | 3.4   | J        | 7.4         |
| Lead         | ug/l  | 440     | 1800     | 4400          | 200.7  | 5   | 1     | <b>'</b> | 5           |
| Mercury      | ug/l  | 8.7     | 35       | 88            | 245.1  | 1   | 0.025 | J        | 0.19        |
| Selenium     | ug/l  | 3300    | 13000    | 33000         | 200.7  | 10  | 3.3   | <        | 10          |
| Silver       | ug/l  | 64      | 360      | 960           | 200.7  | 10  | 0.66  | <        | 10          |
| Zinc         | ug/l  | 2700    | 16000    | 42000         | 200.7  | 10  | 2.8   |          | 49.2        |
| Aluminum     | ug/l  |         | sed to b |               | 200.7  | 100 | 20    |          | 217         |
| Barium       | ug/l  |         |          |               | 200.7  | 10  | 1.3   |          | 48.2        |

J: Report between PQL and MDL

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR: January 2005** 

**REPORT DUE:** February 2005

**EXACT SAMPLE POINT:** Recycle pump station

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff

SIGNED UNDER PENALTY OF PERJURY

Vasa ciptat

| × .      | рН          | Conductivity | TSS     | VSS     | BOD      |
|----------|-------------|--------------|---------|---------|----------|
| Units    | mg/l        | mmho/cm      | mg/l    | mg/l    | mg/l     |
| Method   | SM 4500 H-B |              | SM2540D | SM 2540 | SM 5210B |
| ML       |             |              | 1       | 1       | . 3      |
| 1/1/2005 |             |              |         |         |          |
| 2        |             |              |         |         |          |
| 3        | 7.9         | 1427         | 3.6     | 3.2     | 6.4      |
| 4        |             |              |         |         |          |
| 5        |             |              |         |         |          |
| 6        |             |              |         |         |          |
| 7        |             |              |         |         |          |
| 8        |             |              |         |         | ·        |
| . 9      | 7.8         | 1411         | 4.9     | 4.4     | < 4      |
| 10       |             |              |         |         |          |
| 11       |             |              |         |         | ·        |
| 12       |             |              |         |         |          |
| 13       |             |              |         |         |          |
| 14       |             |              |         |         |          |
| 15       |             |              |         |         |          |
| 16       |             |              |         |         | "        |
| 17       |             |              |         |         |          |
| 18       |             |              |         |         |          |
| 19       | 7.8         | 1652         | 3.3     | 3.1     | 2.1      |
| 20       |             |              |         |         |          |
| · 21     |             |              |         |         |          |
| 22       |             | - 1          |         |         |          |
| 23       |             |              |         |         |          |
| 24       |             |              |         |         |          |
| 25       |             |              |         |         |          |
| 26       | 7.7         | 1612         | 4.5     | 3.6     | < 3      |
| 27       |             |              |         |         |          |
| 28       |             |              |         |         |          |
| 29       |             |              |         |         |          |
| 30       |             |              |         |         | •        |
| 31       |             |              |         |         |          |
| Average  | 7.8         | 1526         | 4.1     | 3.6     | < 3.9    |
| Maximum  | 7.9         | 1652         | 4.9     | 4.4     | 6.4      |
| Minimum  | 7.7         | 1411         | 3.3     | 3.1     | 2.1      |

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John Burcham
HARRF Superintendent
1521 South Hale Avenue, Escondido, CA 92029
Phone: 760-839-6273 Fax: 760-738-5168

March 24, 2005

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
Attn: POTW Compliance Unit

Subject: Submittal of February 2005 Monthly Reports

Dear Sirs:

Attached are the subject Discharge Monitoring Reports for the Hale Avenue Resource Recovery Facility (HARRF) as required by Order No. 93-70.

If you have any questions, contact me at (760) 839-6273.

Sincerely,

John Burcham

HARRF Superintendent

Attached: February 2005 Monthly Reports

WATER QUALITY CONTROL BOARD

# **SELF-MONITORING REPORT**

#### FEBRUARY 2005

#### CITY OF ESCONDIDO

Hale Avenue Resource Recovery Facility

Order No. 93-70

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Mary Ann Mann Utilities Manager

# **SELF- MONITORING REPORT REVIEW**

To: CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN DIEGO REGION

9174 Sky Park Court, Suite 100

San Diego, CA 92123-4340

DISCHARGER City of Escondido, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION NO. 93-70

REPORT FOR FEBRUARY 2005 REPORT DUE MARCH 2005

REPORT FREQUENCY MONTHLY

SIGNED UNDER PENALTY OF PERJURY

Our Review of the Attached Self-Monitoring Report Reveals the Following Monitoring Violation(s):

Violations occurred in the month of February were exceeded an average operation turbidity of 2 NTU on February 1,12, 13, 21, and 22 2005.

The Following Remedial Action will be (has been) Taken to Correct the Monitoring Violation Listed Above:

During February 2005 the treatment plant experienced high influent flows caused by an extreme wet weather event(s). A suspected cause was a change in the wastewater makeup due the increased amount of rainwater. Currently the filter aid being used is a poly aluminum chloride (JenChem) product. This product works well within a specific pH range. We suspect that even a slight increase or decrease in pH may change the way the filter aid reacts. What we were experiencing was coagulation of the floc post filter, causing an increase in turbidity. We are researching other filter aid products which would work more efficiently during these events.

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR : February 2005** 

**REPORT DUE: March 2005** 

**EXACT SAMPLE POINT: Effluent end of UV infection Channel** 

SAMPLE TYPE: Continuous recording Flow meter and Turbidity Meter

SIGNED UNDER PENALTY OF PERJURY

Van lightent

| Date     | Flow | Turbidity | Turbidity |
|----------|------|-----------|-----------|
| Units    | MGD  | NTU       | NTU       |
|          |      | Influent  | Effluent  |
| Reqt.    |      | Aveage    | Aveage    |
| 2/1/2005 | 0.02 | 3.0       | / 3.3 /   |
| 2        | *    | * .       | */        |
| 3        | *    | *         | *         |
| 4        | 0.49 | 2.3       | 1.3       |
| 5        | *    | *         | *         |
| 6        | *    | *         | *         |
| 7        | 0.01 | 2.3       | 1.6       |
| 8        | 0.68 | 2.5       | 1.8       |
| 9        | 0.04 | 3.1       | 1.7       |
| 10       | *    | *         | *         |
| 11       | 0.14 | 3.4       | 1.9       |
| 12       | 1.16 | 3.3       | 2.3       |
| 13       | 1.00 | 2.8       | 2.3       |
| 14       | *    | *         | *         |
| 15       | *    | *         | *         |
| 16       | *    | *         | *         |
| 17       | *    | *         | *         |
| 18       | *    | *         | *         |
| 19       | *    | *         | *         |
| 20       | *    | *         | *         |
| 21       | 1.76 | 8.4       | (,3.3)    |
| 22       | 0.06 | 8.1       | (3.2)     |
| 23       | *    | *         | *         |
| 24       | *    | *         | *         |
| 25       | *    | *         | *         |
| 26       | *    | . *       | *         |
| 27       | 0.14 | 9.5       | 0.1       |
| 28       | *    | *         | *         |
|          |      |           |           |
|          |      |           |           |
|          |      |           |           |
| Average  | 0.5  | 4.4       | 2.1       |
| Maximum  | 1.8  | 9.5       | 3.3       |
| Minimum  | 0.0  | 2.3       | 0.1       |

<sup>\* :</sup>No distribution

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR : February 2005** 

REPORT DUE: March 2005

**EXACT SAMPLE POINT: Effluent end of UV infection Channel** 

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff

SIGNED UNDER PENALTY OF PERJURY Van Vishal

| TC       | TOTAL COLIFORMS |           |          |             |  |  |
|----------|-----------------|-----------|----------|-------------|--|--|
| DATE     |                 | Daily     |          | 7 day       |  |  |
|          | 1               | Maximum   |          | Median      |  |  |
| Units    |                 | mpn/100ml |          | mpn/100ml   |  |  |
| Reqt.    |                 | 23        |          | 2           |  |  |
| 2/1/2005 | <               | 2         | <        | 2           |  |  |
| 2        |                 |           |          |             |  |  |
| 3        |                 |           |          |             |  |  |
| 4        | ٧               | 2         | ٧        | 2           |  |  |
| 5        |                 |           |          |             |  |  |
| 6        |                 |           |          |             |  |  |
| 7        | <               | 2         | ٧        | 2<br>2<br>2 |  |  |
| 8        | ٧               | 2         | ٧        | 2           |  |  |
| 9        | <               | 2         | ٧        | 2           |  |  |
| 10       |                 |           |          |             |  |  |
| 11       | ٧               | 2         | ٧        | 2 2 2       |  |  |
| 12       | ٧               | 2         | ٧        | 2           |  |  |
| 13       | <               | 2         | <b>~</b> | 2           |  |  |
| 14       |                 |           |          |             |  |  |
| 15       |                 |           |          |             |  |  |
| 16       |                 |           |          |             |  |  |
| 17       | <u></u>         |           |          | ,           |  |  |
| 18       |                 |           |          |             |  |  |
| 19       |                 |           |          |             |  |  |
| 20       |                 |           |          |             |  |  |
| 21       | <               | 2         | <        | 2           |  |  |
| 22       | <u> </u>        | 2         | <        | 2           |  |  |
| 23       | <u> </u>        |           |          |             |  |  |
| 24       |                 |           |          |             |  |  |
| 25       |                 |           | <u> </u> |             |  |  |
| 26       |                 |           |          |             |  |  |
| 27       | <               | 2         | ٧        | 2           |  |  |
| 28       |                 |           | ٧        | 2           |  |  |
|          |                 |           |          |             |  |  |
|          |                 |           |          |             |  |  |
|          |                 |           |          |             |  |  |
| Median   | ٧               | 2         | ٧        | 2           |  |  |
| Maximum  |                 | 2 .       | <        | 2           |  |  |
| Minimum  | <b>'</b>        | 2         | <        | 2           |  |  |

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

**REPORT FOR : February 2005** 

REPORT DUE: March 2005

**EXACT SAMPLE POINT: Recycle pump station** 

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff & APCL

SIGNED UNDER PENALTY OF PERJURY Van Literal

| Constituent/<br>Property            | 12-month<br>Average<br>Limit | Daily<br>Maximum<br>Limit | Method      | ML/<br>PQL | MDL     | Sample<br>Date     | Daily<br>Maximum | Monthly<br>Average | Units |
|-------------------------------------|------------------------------|---------------------------|-------------|------------|---------|--------------------|------------------|--------------------|-------|
| Total Dissolved<br>Solid            | 1000                         | 1100                      | SM2540C     | 10         | 1       | 2/1/05 &<br>2/8/05 | 905              | 850                | mg/l  |
| Fluoride                            | 2.0                          |                           | EPA 300.0   | 0.05       | 0.008   | 2/8/05             | 0.890            | 0.890              | mg/l  |
| Chloride                            | 300                          | 330                       | EPA 300.0   | 0.5        | 0.08    | 2/8/05             | 196              | 196                | mg/l  |
| Sulfate                             | 350                          | 400                       | EPA 300.0   | 1          | 0.1     | 2/8/05             | 212              | 212                | mg/l  |
| Manganese                           | 0.05                         | 0.06                      | 200.7       | 0.005      | 1.7E-04 | 2/8/05             | 0.0354           | 0.0354             | mg/l  |
| Boron                               | 0.8                          |                           | 200.7       | 0.300      | 0.038   | 2/8/05             | 0.755            | 0.755              | mg/l  |
| Iron                                | 0.3                          | 0.4                       | 200.7       | 0.050      | 0.0054  | 2/8/05             | 0.0444           | 0.0444             | mg/l  |
| Adjusted Sodium<br>Absorption Ratio |                              |                           | Calculation | . <b></b>  |         | 2/8/05             | 4.24             | 4.24               |       |
| Percent Sodium                      | 60                           | 65                        | Calculation |            |         | 2/8/05             | 51.3             | 51.3               | %     |

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

**REPORT FOR :February 2005** 

**REPORT DUE: March 2005** 

EXACT SAMPLE POINT: Recycle pump station

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY APCL

SIGNED UNDER PENALTY OF PERJURY

Van hiptopt

| Constituent/ | Units | 6-Month | Daily   | Instantaneous | Method | PQL | MDL   |       |             |
|--------------|-------|---------|---------|---------------|--------|-----|-------|-------|-------------|
| Property     |       | Median  | Maximum | Maximum       |        |     |       | Daily | Max. Result |
| Sample Date  |       |         |         |               |        |     |       |       | 2/8/2005    |
| Arsenic      | ug/l  | 1100    | 6400    | 17000         | 200.7  | 5   | 1.2   | <     | 5           |
| Cadmium      | ug/l  | 220     | 880     | 2200          | 200.7  | 2   | 0.24  | <     | 2           |
| Chromium     | ug/l  | 440     | 1800    | 4400          | 200.7  | 5   | 2.1   | <     | 5           |
| Copper       | ug/l  | 220     | 2200    | 6200          | 200.7  | 10  | 3.4   |       | 10          |
| Lead         | ug/l  | 440     | 1800    | 4400          | 200.7  | 5   | 1.    | <     | 5           |
| Mercury      | ug/l  | 8.7     | 35      | 88            | 245.1  | 1   | 0.025 |       | 0.93        |
| Selenium     | ug/l  | 3300    | 13000   | 33000         | 200.7  | 10  | 3.3   | J     | 4           |
| Silver       | ug/l  | 64      | 360     | 960           | 200.7  | 10  | 0.66  | <     | 10          |
| Zinc         | ug/l  | 2700    | 16000   | 42000         | 200.7  | 10  | 2.8   |       | 57.9        |
| Aluminum     | ug/l  |         |         |               | 200.7  | 100 | 20    |       | 155         |
| Barium       | ug/l  |         |         |               | 200.7  | 10  | 1.3   |       | 44.6        |

J: Report between PQL and MDL

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR : February 2005** 

**REPORT DUE: March 2005** 

**EXACT SAMPLE POINT:** Recycle pump station

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff

SIGNED UNDER PENALTY OF PERJURY

Van lightent

|          | pН          | Conductivity | TSS     | VSS     | BOD      |
|----------|-------------|--------------|---------|---------|----------|
| Units    | mg/l        | mmho/cm      | mg/l    | mg/l    | mg/l     |
| Method   | SM 4500 H-B | SM2510B      | SM2540D | SM 2540 | SM 5210B |
| ML       |             |              | 1       | 1       | 3        |
| 2/1/2005 | 7.80        | 1585         | 4.8     | 4.5     | < 3      |
| . 2      |             |              |         |         |          |
| 3        |             |              |         |         |          |
| 4        |             |              |         |         |          |
| 5        |             |              | •       |         |          |
| 6        |             |              |         |         |          |
| 7        |             |              |         |         |          |
| 8        | 7.6         | 1514         | 3.7     | 3.4     | 3.1      |
| 9        |             |              |         |         |          |
| 10       |             |              |         | l       |          |
| 11       |             |              |         |         |          |
| 12       |             |              |         |         |          |
| 13       |             |              |         |         |          |
| 14       |             |              |         |         |          |
| 15       |             |              |         |         |          |
| 16       |             |              |         |         |          |
| 17       |             |              |         |         |          |
| 18       |             |              |         |         |          |
| 19       |             |              |         |         |          |
| 20       | · ·         |              |         |         |          |
| 21       | 7.6         | 1314         | 9.3     | 7.9     | 6.7      |
| 22       |             |              |         |         |          |
| 23       |             |              |         |         |          |
| 24       |             |              |         |         |          |
| 25       |             |              |         |         |          |
| 26       |             |              |         |         |          |
| 27       |             |              |         |         |          |
| 28       |             |              |         |         |          |
| 29       |             |              |         |         |          |
| 30       |             | ,            |         |         |          |
| 31       |             |              |         |         |          |
| Average  | 7.7         | 1471         | 5.9     | 5.3     | < 4.3    |
| Maximum  | 7.8         | 1585         | 9.3     | 7.9     | 6.7      |
| Minimum  | . 7.6       | 1314         | 3.7     | 3.4     | < 3.0    |



SAN DIEGU REGIONAL John Burghamer ROUALITY HARRF Somening of the ARD 1521 South Hale Avenue, Escondido, CA 92029 Phone: 760-839-6273 Fax: 760-738-5168

April 27, 2005

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
Attn: POTW Compliance Unit

Subject: Submittal of March 2005 Monthly Reports

Dear Sirs:

Attached are the subject Discharge Monitoring Reports for the Hale Avenue Resource Recovery Facility (HARRF) as required by Order No. 93-70.

If you have any questions, contact me at (760) 839-6273.

Sincerely,

John Burcham

HARRF Superintendent

Attached: March 2005 Monthly Reports

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

2005 MAY -2 ₱ 2: 0₺

### SELF- MONITORING REPORT

#### **MARCH 2005**

#### CITY OF ESCONDIDO

## Hale Avenue Resource Recovery Facility

**Order No. 93-70** 

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Mary Ann Mann Utilities Manager

# SELF- MONITORING REPORT REVIEW

To: CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN DIEGO REGION

9174 Sky Park Court, Suite 100

San Diego, CA 92123-4340

DISCHARGER City of Escondido, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION NO. 93-70

REPORT FOR MARCH 2005 REPORT DUE APRIL 2005

REPORT FREQUENCY MONTHLY

SIGNED UNDER PENALTY OF PERJURY

Our Review of the Attached Self-Monitoring Report Reveals the Following Monitoring Violation(s):

No violation occurred in during March 2005.

The Following Remedial Action will be (has been) Taken to Correct the Monitoring Violation Listed Above:

No remedial action required.

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR: March 2005** 

**REPORT DUE: APRIL 2005** 

**EXACT SAMPLE POINT: Effluent end of UV infection Channel** 

SAMPLE TYPE: Continuous recording Flow meter and Turbidity Meter

SIGNED UNDER PENALTY OF PERJURY

Van hiplant

| Date     | Flow | Turbidity | Turbidity .   |
|----------|------|-----------|---------------|
| Units    | MGD  | NTU       | NTU           |
|          |      | Influent  | Effluent      |
| Reqt.    |      | Aveage    | Aveage        |
| 3/1/2005 | *    | 7 0 9     | 7 11 0 11 9 0 |
| 2        | *    |           |               |
| 3        | 0.40 | 8.5       | 2.3           |
| 4        | 0.48 | 7.6       | 1.8           |
| 5        | *    |           |               |
| 6        | *    |           |               |
| 7        | 0.11 | 5.9       | 2.1           |
| 8        | 0.50 | 5.0       | 1.4           |
| 9        | *    |           | ,             |
| 10       | 0.34 | 3.8       | 1.3           |
| 11       | 1.07 | 3.8       | 1.7           |
| 12       | *    |           |               |
| 13       | *    |           |               |
| 14       | *    |           |               |
| 15       | 0.33 | 4.0       | 1.5           |
| 16       | 0.68 | 4.5       | 1.9           |
| 17       | *    |           |               |
| 18       | *    |           |               |
| 19       | *    |           |               |
| 20       | *    |           |               |
| 21       | 0.42 | 4.3       | 1.9           |
| 22       | 0.55 | 4.5       | 1.8           |
| 23       | *    |           |               |
| 24       | *    | ,         |               |
| 25       | 0.54 | 5.5       | 1.8           |
| 26       | *    |           |               |
| 27       | *    |           |               |
| 28       | 0.81 | 3.9       | 1.9           |
| 29       | 0.85 | 3.7       | 1.7           |
| 30       | *    |           |               |
| 31       | *    |           |               |
| Average  | 0.5  | 5.0       | 1.8           |
| Maximum  | 1.1  | 8.5       | 2.3           |
| Minimum  | 0.1  | 3.7       | 1.3           |

<sup>\* :</sup>No distribution

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR: March 2005** 

**REPORT DUE: APRIL 2005** 

**EXACT SAMPLE POINT: Effluent end of UV infection Channel** 

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff

SIGNED UNDER PENALTY OF PERJURY Van Lift

| TOTAL COLIFORMS |           |            |  |  |  |  |
|-----------------|-----------|------------|--|--|--|--|
| DATE            | Daily     | 7 day      |  |  |  |  |
|                 | Maximum   | Median     |  |  |  |  |
| Units           | mpn/100ml | mpn/100ml  |  |  |  |  |
| Reqt.           | 23        | 2          |  |  |  |  |
| 3/1/2005        | *         | *          |  |  |  |  |
| 2               | *         | *          |  |  |  |  |
| 3               | < 2       | < 2        |  |  |  |  |
| 4               | < 2       | < 2        |  |  |  |  |
| 5               | *         | *          |  |  |  |  |
| 6               | *         | *          |  |  |  |  |
| 7               | < 2       | < 2        |  |  |  |  |
| 8               | < 2       | < 2        |  |  |  |  |
| 9               |           | *          |  |  |  |  |
| 10              | < 2       | < 2        |  |  |  |  |
| 11              | < 2       | < 2        |  |  |  |  |
| 12              | < 2       | < 2        |  |  |  |  |
| 13              | *         | *          |  |  |  |  |
| 14              | *         | *          |  |  |  |  |
| 15              | < . 2     | < 2        |  |  |  |  |
| 16              | 2.        | 2          |  |  |  |  |
| 17              | *         | * .        |  |  |  |  |
| 18              | *         | *          |  |  |  |  |
| 19              | *         | *          |  |  |  |  |
| 20              | *         | *          |  |  |  |  |
| 21              | < 2       | < 2        |  |  |  |  |
| 22              | < 2       | < 2        |  |  |  |  |
| 23              | *         | *          |  |  |  |  |
| 24              | *         | . *        |  |  |  |  |
| 25              | < 2       | < 2        |  |  |  |  |
| 26              | *         | *          |  |  |  |  |
| 27              | *         | *          |  |  |  |  |
| 28              | < 2       | < 2        |  |  |  |  |
| 29              | < 2       | < 2        |  |  |  |  |
| 30              | *         | *          |  |  |  |  |
| 31              | *         | *          |  |  |  |  |
| Median          | < 2       | < 2        |  |  |  |  |
| Maximum         | 2         | < 2<br>< 2 |  |  |  |  |
| Minimum         | < 2       | < 2        |  |  |  |  |

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FOR: March 2005

**REPORT DUE: APRIL 2005** 

**EXACT SAMPLE POINT: Recycle pump station** 

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff & APCL

SIGNED UNDER PENALTY OF PERJURY Van Lintent

| Constituent/<br>Property            | 12-month<br>Average<br>Limit | Daily<br>Maximum<br>Limit | Method      | ML/<br>PQL | MDL     | Sample<br>Date | Daily<br>Maximum | Monthly<br>Average | Units       |
|-------------------------------------|------------------------------|---------------------------|-------------|------------|---------|----------------|------------------|--------------------|-------------|
| Total Dissolved<br>Solid            | 1000                         | 1100                      | SM2540C     | 10         | 1       | 3/3/05         | 935              | 888                | mg/l        |
| Fluoride                            | 2.0                          |                           | EPA 300.0   | 0.05       | 0.008   | 3/3/05         | 0.73             | 0.73               | mg/l        |
| Chloride                            | 300                          | 330                       | EPA 300.0   | 0.5        | 0.08    | 3/3/05         | 195              | 195                | mg/l        |
| Sulfate                             | 350                          | 400                       | EPA 300.0   | 1          | 0.1     | 3/3/05         | 224              | 224                | mg/l        |
| Manganese                           | 0.05                         | 0.06                      | 200.7       | 0.005      | 1.7E-04 | 3/3/05         | 0.06             | 0.06               | mg/l        |
| Boron                               | 0.8                          |                           | 200.7       | 0.300      | 0.038   | 3/3/05         | 0.545            | 0.545              | mg/l        |
| Iron                                | 0.3                          | 0.4                       | 200.7       | 0.050      | 0.0054  | 3/3/05         | 0.051            | 0.051              | mg/l        |
| Adjusted Sodium<br>Absorption Ratio |                              |                           | Calculation |            |         | 3/3/05         | 4.27             | 4.27               | <del></del> |
| Percent Sodium                      | 60                           | 65                        | Calculation |            |         | 3/3/05         | 49.7             | 49.7               | % .         |

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

**REPORT FOR: March 2005** 

REPORT DUE: APRIL 2005

**EXACT SAMPLE POINT: Recycle pump station** 

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY APCL

SIGNED UNDER PENALTY OF PERJURY Van Liptent

| Constituent/ | Units | 6-Month | Daily   | Instantaneous | Method | PQL  | MDL   |       |               |
|--------------|-------|---------|---------|---------------|--------|------|-------|-------|---------------|
| Property     |       | Median  | Maximum | Maximum       |        |      |       | Daily | / Max. Result |
| Sample Date  |       |         |         |               |        |      |       |       | 3/4/2005      |
| Arsenic      | ug/l  | 1100    | 6400    | 17000         | 200.7  | 5    | 1.2   |       | 6.0           |
| Cadmium      | ug/l  | 220     | 880     | 2200          | 200.7  | 2    | 0.24  | ٧     | 2             |
| Chromium     | ug/i  | 440     | 1800    | 4400          | 200.7  | 5    | 2.1   | ٧     | 5             |
| Copper       | ug/l  | 220     | 2200    | 6200          | 200.7  | 10   | 3.4   |       | 12.3          |
| Lead         | ug/l  | 440     | 1800    | 4400          | 200.7  | 5    | 1     | ٧     | 5             |
| Mercury      | ug/l  | 8.7     | 35      | 88            | 245.1  | 1    | 0.025 | J     | 0.16          |
| Selenium     | ug/l  | 3300    | 13000   | 33000         | 200.7  | 10   | 3.3   | J     | 5.1           |
| Silver       | ug/l  | 64      | 360     | 960           | 200.7  | . 10 | 0.66  | ٧     | 10            |
| Zinc         | ug/l  | 2700    | 16000   | 42000         | 200.7  | 10   | 2.8   | ٠     | 54.4          |
| Aluminum     | ug/l  |         |         |               | 200.7  | 100  | 20    |       | 176           |
| Barium       | ug/l  |         |         | ′             | 200.7  | 10   | 1.3   |       | 43.2          |

J: Report between PQL and MDL

DISCHARGER CITY OF ESCONDIDO, Hale Avenue Resource Recovery Facility

ORDER/RESOLUTION No. 93-70

REPORT FREQUENCY MONTHLY

**REPORT FOR: March 2005** 

**REPORT DUE: APRIL 2005** 

**EXACT SAMPLE POINT: Recycle pump station** 

SAMPLE COLLECTED BY Operation Staff SAMPLED ANALYZED BY Lab Staff

SIGNED UNDER PENALTY OF PERJURY Van Liplant

|          | рH          | Conductivity | TSS                                   | VSS     | BOD      |
|----------|-------------|--------------|---------------------------------------|---------|----------|
| Units    | mg/l        | mmho/cm      | mg/l                                  | mg/l    | mg/l     |
| Method   | SM 4500 H-B |              | SM2540D                               | SM 2540 | SM 5210B |
| ML       |             |              | 1                                     | 1       | 3        |
| 3/1/2005 |             |              |                                       |         |          |
| 2        |             |              |                                       |         | ,        |
| 3        | 7.7         | 1524         | 5,4                                   | 4.7     | 4.4      |
| 4        |             |              |                                       |         |          |
| 5        |             |              |                                       |         | ,        |
| 6        |             |              |                                       |         |          |
| 7        |             |              |                                       |         |          |
| 8        | 7.7         | 1330         | 3.0                                   | 2.3     | < 3      |
| 9        |             |              |                                       |         |          |
| 10       |             |              |                                       |         |          |
| . 11     |             |              |                                       |         |          |
| 12       | ·           |              |                                       |         |          |
| 13       |             |              | · · · · · · · · · · · · · · · · · · · |         |          |
| 14       |             |              |                                       | · ·     |          |
| 15       | 7.6         | 1554         | 3.8                                   | 3.4     | < 3      |
| 16       |             |              |                                       |         |          |
| 17       |             |              |                                       |         |          |
| 18       | -           |              |                                       | ·       |          |
| 19       |             |              |                                       |         |          |
| 20       |             |              |                                       |         |          |
| 21       | 7.7         | 1505         | 5.3                                   | 4.2     | < 3      |
| 22       |             |              |                                       |         |          |
| 23       |             |              |                                       |         |          |
| 24       |             |              |                                       |         |          |
| 25       |             |              |                                       |         |          |
| 26       |             |              |                                       |         |          |
| 27       |             |              |                                       |         |          |
| 28       | 7.7         | 1480         | 4.8                                   | 4.4     | < 3      |
| 29       |             |              |                                       |         |          |
| 30       |             |              |                                       |         |          |
| 31       |             |              |                                       |         |          |
| Average  | 7.7         | 1479         | 4.5                                   | 3.8     | < 3.3    |
| Maximum  | 7.7         | 1554         | 5.4                                   | 4.7     | 4.4      |
| Minimum  | 7.6         | 1330         | 3.0                                   | 2.3     | < 3.0    |